

CLAIMS

1. A multi-color two-dimensional bar code comprising reference dots showing a tint in a part of dots.

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2. An image display device, comprising:

a display output device for displaying an image; and
a tint control part for controlling a tint of the image that is output on the display output device;

10 wherein the tint control part controls the tint of the image by referring to reference dots of a multi-color two-dimensional bar code that includes the reference dots showing a tint in a part of dots.

3. An information terminal device, comprising:

15 a camera part for photographing an image;
a bar code processing part for recognizing a bar code from the image photographed by the camera part to decode information from the bar code; and
further comprising:

20 the camera part;

wherein the tint correcting part corrects the tint of the photographed image by referring to a tint shown by reference dots of a multi-color two-dimensional bar code that includes the reference dots showing a tint in a part of dots.

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4. A multi-color two-dimensional bar code, comprising compare dots showing a number of tints used for a bar code in a part of dots.

5. The multi-color two-dimensional bar code according to claim 4, wherein
the compare dots are a plurality of dots composed of two colors of white and black.

5 6. An information terminal device, comprising:
a camera part for photographing an image;
a bar code processing part for recognizing a bar code from the image
photographed by the camera part to decode information from the bar code; and
further comprising:
10 a notification part for notifying a failure in recognition of a bar code by the
bar code processing part;
wherein the notification part notifies the failure in recognition of a bar code
when a number of tints shown by compare dots of a multi-color two-dimensional
bar code including the compare dots showing a number of tints used for the bar
15 code in a part of dots does not match to a number of tints appearing in the
photographed multi-color two-dimensional bar code.

7. An image display device for displaying an image, comprising:
a receiving part for receiving a signal notifying that a number of tints
20 shown by compare dots does not match to a number of tints appearing in a multi-
color two-dimensional bar code from an information terminal device for displaying
the multi-color two-dimensional bar code including the compare dots showing the
number of tints used for a bar code in a part of dots and further recognizing the
multi-color two-dimensional bar code to decode information; and
25 a tint control part for controlling the tint of an image that is output on the
image display device in response to the reception of the signals.

8. A method for displaying a multi-color two-dimensional bar code including reference dots showing a tint in a part of dots on an image display device, the method comprising:

referring to the reference dots of the multi-color two-dimensional bar code;

5 and

controlling a tint of an image displayed on the image display device.

9. A method of decoding information of a multi-color two-dimensional bar code of photographing the multi-color two-dimensional bar code including reference dots showing a tint in a part of dots to decode information from the 10 multi-color two-dimensional bar code, the method comprising:

referring to the reference dots of the multi-color two-dimensional bar code;

and

correcting a tint of the photographed picture image.

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10. A method of decoding information of a multi-color two-dimensional bar code of photographing the multi-color two-dimensional bar code including compare dots showing a number of colors in a part of dots to decode information from the multi-color two-dimensional bar code, the method comprising:

20 referring to the compare dots of the multi-color two-dimensional bar code,

and

notifying a failure in recognition of a bar code when a number of tints shown by the compare dots does not match to a number of tints appearing in the photographed multi-color two-dimensional bar code.

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11. A method of displaying a multi-color two-dimensional bar code for displaying the multi-color two-dimensional bar code including compare dots

showing a number of colors in a part of dots on an image display device, the method comprising:

- receiving a signal notifying that a number of tints shown by the compare dots does not match to a number of tints appearing in the multi-color two-dimensional bar code from the information terminal device recognizing the multi-color two-dimensional bar code displayed on the image display device; and
- controlling the tint of the image that is displayed on the image display device.

10 12. An information communication system, comprising an image display device and an information terminal device,

wherein the image display device comprises:

a display output device for displaying a multi-color two-dimensional bar code including reference dots showing a tint and compare dots showing a 15 number of colors in a part of dots;

a receiving part for receiving a signal notifying a failure in recognition of a bar code from the information terminal device; and

a tint control part for controlling a tint of an image based on the reference dots and the signal notifying a failure in recognition of the bar code; and

20 wherein the information terminal device comprising:

a camera part for photographing an image that is displayed on the display output device;

a bar code processing part for recognizing the multi-color two-dimensional bar code from the image photographed by the camera part to decode 25 information from the multi-color two-dimensional bar code; and

a notification part for notifying the failure in recognition of a bar code when a number of tints shown by the compare dots does not match to a number of

tints appearing in the reference dots.

13. An information communication method for decoding information from a multi-color two-dimensional bar code displayed on an image display device, the
5 method comprising:

displaying the multi-color two-dimensional bar code including reference dots showing a tint and compare dots showing a number of colors in a part of dots;
controlling the tint of the displayed image by referring to the reference dots;

10 recognizing the multi-color two-dimensional bar code from the displayed image to decode information;

notifying a failure in recognition of a bar code when a number of tints shown by the compare dots does not match to a number of tints appearing in the reference dots; and

15 controlling the tint of the displayed image when the signal notifying the failure in recognition of a bar code is received.